

In The Claims

Please amend the claims as follows:

1. (PREVIOUSLY PRESENTED) A noise canceling circuit, comprising:
 - a first source terminal;
 - a second source terminal;
 - an output terminal;
 - a reference voltage generator for generating a reference voltage, having an input connected to said first source terminal, and an input connected to said second source terminal, and an output;
 - a bias current generator for generating a bias current determining an operating current, having a first source input, a second source input, and an output;
 - a voltage-current generator for generating an output of a power circuit, having a first input connected to said first source terminal, a second input, and an output connected to said output terminal;
 - a voltage divider for detecting a fluctuation of an output voltage at the output terminal, having an input connected to said second source terminal, an input connected to said output terminal, and an output; and
 - an error amplifier for amplifying an error voltage between said reference voltage and an output voltage from said output of said voltage divider, having an input connected to said first source terminal, an input connected to said second source terminal, an input connected to said output of said reference voltage generator, an input connected to said output of said bias current generator, an input connected to said output of said voltage divider, and an output connected to said second input of said voltage-current generator,wherein said error amplifier comprises an input part, a load part, a noise suppression part, and a phase compensation capacitor,
wherein said input part comprises a pair of first type semiconductor elements,
wherein said load part comprises a pair of second type semiconductor elements,
and

wherein said noise suppression part (i) is disposed between said input part and said load part, (ii) has an input connected to said first source terminal, and (iii) comprises a pair of the first type semiconductor elements of different dimension in length or width.

2. (PREVIOUSLY PRESENTED) A noise canceling circuit according to Claim 1, further comprising:

a canceling signal generator containing a capacitance different from said phase compensation capacitor,

wherein said capacitance is connected to (i) said output of said voltage-divider, and (ii) the first source terminal or a circuit node changing with a same phase as a voltage at the first source terminal.

3. (canceled)

4. (canceled)

5. (canceled)

6. (PREVIOUSLY PRESENTED) A noise canceling circuit, comprising:

a first source terminal;

a second source terminal;

an output terminal;

a reference voltage generator for generating a reference voltage and generating a bias current determining an operating current, having an input connected to said first source terminal, an input connected to said second source terminal, and a reference voltage output;

a voltage-current generator for generating an output of a power circuit, having a first input connected to said first source terminal, a second input, and an output connected to said output terminal;

a voltage divider for detecting a fluctuation of an output voltage at the output terminal, having an input connected to said second source terminal, an input connected to said output terminal, and an output; and

an error amplifier for amplifying an error voltage between said reference voltage and an output voltage from said output of said voltage divider, having an input connected to said first source terminal, an input connected to said second source terminal, an input connected to said reference voltage output, an input connected to said output of said voltage divider, and an output connected to said second input of said voltage-current generator,

wherein said error amplifier comprises an input part, a load part, a noise suppression part, and a phase compensation capacitor,

wherein said input part comprises a pair of first type semiconductor elements, wherein said load part comprises a pair of second type semiconductor elements, and

wherein said noise suppression part (i) is disposed between said input part and said load part, (ii) has an input connected to said first source terminal, and (iii) comprises a pair of the first type semiconductor elements of different dimension in length or width.

7. (PREVIOUSLY PRESENTED) A noise canceling circuit according to Claim 1, further comprising:

a canceling signal generator containing a capacitance different from said phase compensation capacitor,

wherein said capacitance is connected to (i) said output of said voltage-divider, and (ii) the first source terminal or a circuit node changing with a same phase as a voltage at the first source terminal.